

Application number: 09/893,952  
Application filed: 2001 June 28  
Applicant: Charles Vann  
Title: Orientation and Position Sensor  
Examiner: Hien X. Vo  
Date: June 25, 2003

11/CO(X-E)  
T. Steptoe  
6-30-03

**Amendment Continuation**

Assistant Commissioner for Patents  
Washington, D.C. 20231

Sir:

In response to Advisory Action mailed March 2003, please amend the above application as follows: Cancel claims 4-7. Add the following claims.

8. A position and orientation sensor, comprising:

an alignment target having a first optical feature a fixed distance from  
a second optical feature;

(N-E) an imaging device that can form an optical image of said alignment  
target with said first feature in focus and said second feature out  
of focus;

whereby the location and size of said first feature compared to the  
location and size of said second feature in said optical image are  
measurements of up to three orthogonal positions and up to three  
orthogonal orientations of said alignment target with respect to said imaging  
device.

9. The sensor of claim 1 wherein one or more of said features is a


cross hair.

10. The sensor of claim 1 wherein said imaging device comprises a lens and a transparent projection screen.
11. The sensor of claim 1 wherein said imaging device is a camera.
12. The sensor of claim 1 further including a monitor connected to said imaging device.
13. The sensor of claim 1 further including a computer connected to said imaging device.

**Conditional request for constructive assistance**

If for any reason this application is not believed to be in full condition for allowance, applicant respectfully requests the constructive assistance and suggestions of the examiner pursuant to M.P.E.P. & 2173.02 and 707.07(j) in order that the undersigned can place this application in allowable condition as soon as possible and without the need for further proceedings.

Sincerely,



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